

**§ 63.749 Compliance dates and determinations.**

(a) *Compliance dates.* Each owner or operator of an existing source subject to this subpart shall comply with the requirements of this subpart within 3 years after the effective date. Owners or operators of new sources subject to this subpart shall comply on the effective date or upon startup, whichever is later. In addition, each owner or operator shall comply with the compliance dates specified in § 63.6(b) and § 63.6(c).

(b) *General.* Each facility subject to this subpart shall be considered in non-compliance if the owner or operator fails to submit an operation and maintenance plan as required by § 63.743(b) or uses a control device other than one specified in this subpart that has not been approved by the Administrator, as required by § 63.743(c).

(c) *Cleaning operations.* Each cleaning operation subject to this subpart shall be considered in noncompliance if the owner or operator fails to institute and carry out the housekeeping measures required under § 63.744(a). Incidental emissions resulting from the activation of pressure release vents and valves on enclosed cleaning systems are exempt from this paragraph.

(1) *Hand-wipe cleaning.* An affected hand-wipe cleaning operation shall be considered in compliance when all hand-wipe cleaning solvents, excluding those used for hand cleaning of spray gun equipment under § 63.744(c)(3), meet either the composition requirements specified in § 63.744(b)(1) or the vapor pressure requirement specified in § 63.744(b)(2).

(2) *Spray gun cleaning.* An affected spray gun cleaning operation shall be considered in compliance when each of the following conditions is met:

(i) One of the four techniques specified in § 63.744 (c)(1) through (c)(4) is used;

(ii) The technique selected is operated according to the procedures specified in § 63.744 (c)(1) through (c)(4) as appropriate; and

(iii) If an enclosed system is used, monthly visual inspections are conducted and any leak detected is repaired within 15 days after detection. If the leak is not repaired by the 15th day after detection, the solvent shall be re-

moved and the enclosed cleaner shall be shut down until the cleaner is repaired or its use is permanently discontinued.

(3) *Flush cleaning.* An affected flush cleaning operation shall be considered in compliance if the operating requirements specified in § 63.744(d) are implemented and carried out.

(d) *Organic HAP and VOC content levels—primer and topcoat application operations—*(1) *Performance test periods.* For uncontrolled coatings that are not averaged, each 24 hours is considered a performance test. For compliant and non-compliant coatings that are averaged together, each 30-day period is considered a performance test, unless the permitting agency specifies a shorter averaging period as part of an ambient ozone control program. When using a control device other than a carbon adsorber, three 1-hour runs constitute the test period for the initial and any subsequent performance test. When using a carbon adsorber, each rolling material balance period is considered a performance test.

(2) *Initial performance tests.* If a control device is used, each owner or operator shall conduct an initial performance test to demonstrate compliance with the overall reduction efficiency specified in paragraph § 63.745, unless a waiver is obtained under either § 63.7(e)(2)(iv) or § 63.7(h). The initial performance test shall be conducted according to the procedures and test methods specified in § 63.7 and § 63.750(g) for carbon adsorbers and in § 63.750(h) for control devices other than carbon adsorbers. For carbon adsorbers, the initial performance test shall be used to establish the appropriate rolling material balance period for determining compliance. The procedures in paragraphs (d)(2)(i) through (d)(2)(vi) of this section shall be used in determining initial compliance with the provisions of this subpart for carbon adsorbers.

(i)(A) When either EPA Method 18 or EPA Method 25A is to be used in the determination of the efficiency of a fixed-bed carbon adsorption system with a common exhaust stack for all the individual carbon adsorber vessels pursuant to § 63.750(g) (2) or (4), the test shall consist of three separate runs,

each coinciding with one or more complete sequences through the adsorption cycles of all of the individual carbon adsorber vessels.

(B) When either EPA Method 18 or EPA Method 25A is to be used in the determination of the efficiency of a fixed-bed carbon adsorption system with individual exhaust stacks for each carbon adsorber vessel pursuant to § 63.750(g) (3) or (4), each carbon adsorber vessel shall be tested individually. The test for each carbon adsorber vessel shall consist of three separate runs. Each run shall coincide with one or more complete adsorption cycles.

(ii) EPA Method 1 or 1A of appendix A of part 60 is used for sample and velocity traverses.

(iii) EPA Method 2, 2A, 2C, or 2D of appendix A of part 60 is used for velocity and volumetric flow rates.

(iv) EPA Method 3 of appendix A of part 60 is used for gas analysis.

(v) EPA Method 4 of appendix A of part 60 is used for stack gas moisture.

(vi) EPA Methods 2, 2A, 2C, 2D, 3, and 4 shall be performed, as applicable, at least twice during each test period.

(3) The primer application operation is considered in compliance when the conditions specified in paragraphs (d)(3)(i) through (d)(3)(iv) of this section, as applicable, and in paragraph (e) of this section are met. Failure to meet any one of the conditions identified in these paragraphs shall constitute non-compliance.

(i) For all uncontrolled primers, all values of  $H_i$  and  $H_a$  (as determined using the procedures specified in § 63.750 (c) and (d)) are less than or equal to 350 grams of organic HAP per liter (2.9 lb/gal) of primer (less water) as applied, and all values of  $G_i$  and  $G_a$  (as determined using the procedures specified in § 63.750 (e) and (f)) are less than or equal to 350 grams of organic VOC per liter (2.9 lb/gal) of primer (less water and exempt solvents) as applied.

(ii) If a control device is used:

(A) The overall control system efficiency,  $E_k$ , as determined using the procedures specified in § 63.750(g) for control systems containing carbon adsorbers and in § 63.750(h) for control systems with other control devices, is equal to or greater than 81% during the

initial performance test and any subsequent performance test;

(B) If an incinerator other than a catalytic incinerator is used, the average combustion temperature for all 3-hour periods is greater than or equal to the average combustion temperature established under § 63.751(b)(11); and

(C) If a catalytic incinerator is used, the average combustion temperatures for all 3-hour periods are greater than or equal to the average combustion temperatures established under § 63.751(b)(12).

(iii)(A) Uses an application technique specified in § 63.745 (f)(1)(i) through (f)(1)(viii), or

(B) Uses an alternative application technique, as allowed under § 63.745(f)(1)(ix), such that the emissions of both organic HAP and VOC for the implementation period of the alternative application method are less than or equal to the emissions generated during the initial 30-day period, the period of time required to apply primer to five completely assembled aircraft, or a time period approved by the permitting agency, using HVLP or electrostatic spray application methods as determined using the procedures specified in § 63.750(i).

(iv) Operates all application techniques in accordance with the manufacturer's specifications or locally prepared operating procedures, whichever is more stringent.

(4) The topcoat application operation is considered in compliance when the conditions specified in paragraphs (e)(4)(i) through (e)(4)(iv) of this section, as applicable, and in paragraph (f) of this section are met. Failure to meet any of the conditions identified in these paragraphs shall constitute non-compliance.

(i) For all uncontrolled topcoats, all values of  $H_i$  and  $H_a$  (as determined using the procedures specified in § 63.750(c) and (d)) are less than or equal to 420 grams organic HAP per liter (3.5 lb/gal) of topcoat (less water) as applied, and all values of  $G_i$  and  $G_a$  (as determined using the procedures specified in § 63.750(e) and (f)) are less than or equal to 420 grams organic VOC per liter (3.5 lb/gal) of topcoat (less water and exempt solvents) as applied.

(ii) If a control device is used,

(A) The overall control system efficiency,  $E_k$ , as determined using the procedures specified in § 63.750(g) for control systems containing carbon adsorbers and in § 63.750(h) for control systems with other control devices, is equal to or greater than 81% during the initial performance test and any subsequent performance test;

(B) If an incinerator other than a catalytic incinerator is used, the average combustion temperature for all 3-hour periods is greater than or equal to the average combustion temperature established under § 63.751(b)(11); and

(C) If a catalytic incinerator is used, the average combustion temperatures for all 3-hour periods are greater than or equal to the average combustion temperatures established under § 63.751(b)(12).

(iii)(A) Uses an application technique specified in § 63.745(f)(1)(i) through (f)(1)(ix) or

(B) Uses an alternative application technique as allowed under § 63.745(f)(1)(ix) such that the emissions of both organic HAP and VOC for the implementation period of the alternative application method are less than or equal to the emissions generated during the initial 30-day period, the period of time required to apply topcoat to five completely assembled aircraft, or a time period approved by the permitting agency, using HVLP or electrostatic spray application methods as determined using the procedures specified in § 63.750(i).

(iv) Operates all application techniques in accordance with the manufacturer's specifications or locally prepared operating procedures.

(e) *Inorganic HAP emissions—primer and topcoat application operations.* For each primer or topcoat application operation that emits inorganic HAP, the operation is in compliance when:

(1) It is operated according to the requirements specified in § 63.745(g)(1) through (g)(3); and

(2) It is shut down immediately whenever the pressure drop or water flow rate is outside the limit(s) established for them and is not restarted until the pressure drop or water flow rate is returned within these limit(s), as required under § 63.745(g)(3).

(f) *Organic HAP emissions—Depainting operations—(1) Performance test periods.* When using a control device other than a carbon adsorber, three 1-hour runs constitute the test period for the initial and any subsequent performance test. When a carbon adsorber is used, each rolling material balance period is considered a performance test. Each 24-hour period is considered a performance test period for determining compliance with § 63.746(b)(1). For uncontrolled organic emissions from depainting operations, each calendar year is considered a performance test period for determining compliance with the HAP limits for organic HAP-containing chemical strippers used for spot stripping and decal removal.

(2) *Initial performance tests.* If a control device is used, each owner or operator shall conduct an initial performance test to demonstrate compliance with the overall reduction efficiency specified in § 63.746(c), unless a waiver is obtained under either § 63.7(e)(2)(iv) or § 63.7(h). The initial performance test shall be conducted according to the procedures and test methods specified in § 63.7 and § 63.750(g) for carbon adsorbers and in § 63.750(h) for control devices other than carbon adsorbers. For carbon adsorbers, the initial performance test shall be used to establish the appropriate rolling material balance period for determining compliance. The procedures in paragraphs (2)(i) through (2)(vi) of this section shall be used in determining initial compliance with the provisions of this subpart for carbon adsorbers.

(i)(A) When either EPA Method 18 or EPA Method 25A is to be used in the determination of the efficiency of a fixed-bed carbon adsorption system with a common exhaust stack for all the individual carbon adsorber vessels pursuant to § 63.750(g)(2) or (4), the test shall consist of three separate runs, each coinciding with one or more complete sequences through the adsorption cycles of all of the individual carbon adsorber vessels.

(B) When either EPA Method 18 or EPA Method 25A is to be used in the determination of the efficiency of a fixed-bed carbon adsorption system with individual exhaust stacks for each carbon adsorber vessel pursuant to

§ 63.750(g) (3) or (4), each carbon adsorber vessel shall be tested individually. The test for each carbon adsorber vessel shall consist of three separate runs. Each run shall coincide with one or more complete adsorption cycles.

(ii) EPA Method 1 or 1A of appendix A of part 60 is used for sample and velocity traverses.

(iii) EPA Method 2, 2A, 2C, or 2D of appendix A of part 60 is used for velocity and volumetric flow rates.

(iv) EPA Method 3 of appendix A of part 60 is used for gas analysis.

(v) EPA Method 4 of appendix A of part 60 is used for stack gas moisture.

(vi) EPA Methods 2, 2A, 2C, 2D, 3, and 4 shall be performed, as applicable, at least twice during each test period.

(3) An organic HAP-containing chemical stripper depainting operation is considered in compliance when the conditions specified in paragraph (g)(3)(i) of this section are met.

(i) If a carbon adsorber (or other control device) is used, the overall control efficiency of the control system, as determined using the procedures specified in § 63.750(g) (or other control device as determined using the procedures specified in § 63.750(h)), is equal to or greater than 81% for control systems installed before the effective date, or equal to or greater than 95% for control systems installed on or after the effective date, during the initial performance test and all subsequent material balances (or performance tests, as appropriate).

(ii) For non-HAP depainting operations complying with § 63.746(b)(1);

(A) For any spot stripping and decal removal, the value of C, as determined using the procedures specified in § 63.750(j), is less than or equal to 26 gallons of organic HAP-containing chemical stripper per aircraft depainted for commercial aircraft and is less than or equal to 50 gallons of organic HAP-containing chemical stripper per aircraft depainted for military aircraft calculated on a yearly average; and

(B) The requirements of § 63.746(b)(2) are carried out during malfunctions of non-chemical based equipment.

(g) *Inorganic HAP emissions—depainting operations.* Each depainting operation is in compliance when:

(1) The operating requirements specified in § 63.746(b)(4) are followed; and

(2) It is shut down immediately whenever the pressure drop or water flow rate is outside the limit(s) established for them and is not restarted until the pressure drop or water flow rate is returned within these limit(s), as required under § 63.746(b)(4)(v).

(h) *Chemical milling maskant application operations—(1) Performance test periods.* For uncontrolled chemical milling maskants that are not averaged, each 24-hour period is considered a performance test. For compliant and non-compliant chemical milling maskants that are averaged together, each 30-day period is considered a performance test, unless the permitting agency specifies a shorter period as part of an ambient ozone control program. When using a control device other than a carbon adsorber, three 1-hour runs constitute the test period for the initial and any subsequent performance test. When a carbon adsorber is used, each rolling material balance period is considered a performance test.

(2) *Initial performance tests.* If a control device is used, each owner or operator shall conduct an initial performance test to demonstrate compliance with the overall reduction efficiency specified in § 63.747(d), unless a waiver is obtained under either § 63.7(e)(2)(iv) or § 63.7(h). The initial performance test shall be conducted according to the procedures and test methods specified in § 63.7 and § 63.750(g) for carbon adsorbers and in § 63.750(h) for control devices other than carbon adsorbers. For carbon adsorbers, the initial performance test shall be used to establish the appropriate rolling material balance period for determining compliance. The procedures in paragraphs (h)(2) (i) through (vi) of this section shall be used in determining initial compliance with the provisions of this subpart for carbon adsorbers.

(i)(A) When either EPA Method 18 or EPA Method 25A is to be used in the determination of the efficiency of a fixed-bed carbon adsorption system with a common exhaust stack for all the individual carbon adsorber vessels

pursuant to § 63.750(g) (2) or (4), the test shall consist of three separate runs, each coinciding with one or more complete sequences through the adsorption cycles of all of the individual carbon adsorber vessels.

(B) When either EPA Method 18 or EPA Method 25A is to be used in the determination of the efficiency of a fixed-bed carbon adsorption system with individual exhaust stacks for each carbon adsorber vessel pursuant to § 63.750(g) (3) or (4), each carbon adsorber vessel shall be tested individually. The test for each carbon adsorber vessel shall consist of three separate runs. Each run shall coincide with one or more complete adsorption cycles.

(ii) EPA Method 1 or 1A of appendix A of part 60 is used for sample and velocity traverses.

(iii) EPA Method 2, 2A, 2C, or 2D of appendix A of part 60 is used for velocity and volumetric flow rates.

(iv) EPA Method 3 of appendix A of part 60 is used for gas analysis.

(v) EPA Method 4 of appendix A of part 60 is used for stack gas moisture.

(vi) EPA Methods 2, 2A, 2C, 2D, 3, and 4 shall be performed, as applicable, at least twice during each test period.

(3) The chemical milling maskant application operation is considered in compliance when the conditions specified in paragraphs (i)(3)(i) and (i)(3)(ii) of this section are met.

(i) For all uncontrolled chemical milling maskants, all values of  $H_i$  and  $H_a$  (as determined using the procedures specified in § 63.750 (k) and (l)) are less than or equal to 160 grams of organic HAP per liter (1.3 lb/gal) as applied (less water) and all values of  $G_i$  and  $G_a$  (as determined using the procedures specified in § 63.750 (m) and (n)) are less than or equal to 160 grams of VOC per liter (1.3 lb/gal) of chemical milling maskant (less water and exempt solvents) as applied.

(ii) If a carbon adsorber (or other control device) is used, the overall control efficiency of the control system, as determined using the procedures specified in § 63.750(g) (or systems with other control devices as determined using the procedures specified in § 63.750(h)), is equal to or greater than 81% during the initial performance test period and all

subsequent material balances (or performance tests, as appropriate).

(i) *Handling and storage of waste.* For those wastes subject to this subpart, failure to comply with the requirements specified in § 63.748 shall be considered a violation.

#### § 63.750 Test methods and procedures.

(a) *Composition determination.* Compliance with the hand-wipe cleaning solvent approved composition list specified in § 63.744(b)(1) for hand-wipe cleaning solvents shall be demonstrated using data supplied by the manufacturer of the cleaning solvent. The data shall identify all components of the cleaning solvent and shall demonstrate that one of the approved composition definitions is met.

(b) *Vapor pressure determination.* The composite vapor pressure of hand-wipe cleaning solvents used in a cleaning operation subject to this subpart shall be determined as follows:

(1) For single-component hand-wipe cleaning solvents, the vapor pressure shall be determined using MSDS or other manufacturer's data, standard engineering reference texts, or other equivalent methods.

(2) The composite vapor pressure of a blended hand-wipe solvent shall be determined by quantifying the amount of each organic compound in the blend using manufacturer's supplied data or a gas chromatographic analysis in accordance with ASTM E 260-91 (incorporated by reference as specified in § 63.14 of subpart A of this part) and by calculating the composite vapor pressure of the solvent by summing the partial pressures of each component. The vapor pressure of each component shall be determined using manufacturer's data, standard engineering reference texts, or other equivalent methods. The following equation shall be used to determine the composite vapor pressure:

$$PP_c = \sum_{i=1}^n \frac{(W_i)(VP_i)/MW_i}{\frac{W_w}{MW_w} + \frac{W_e}{MW_e} + \sum_{i=1}^n \frac{W_i}{MW_i}}$$

where:

$W_i$  = Weight of the "i"th VOC compound, grams.